

Listing of All Claims Including Current Amendments

1. (Currently amended) ~~A method~~ Method for the isolation of ~~sylimarin~~ silymarin from ~~Silybum Marianum~~ seeds without precooling ~~the~~ seeds, comprising the following steps:
 - a) grinding the seeds to a fine powder, whereby the seeds have not been precooled prior to grinding;
 - b) defatting the pulverized seeds with a hydrocarbon solvent
 - c) extraction of ~~the~~ defatted seeds with a medium polarity solvent at a the temperature from 18 to 56. °C. in order to obtain a sylimarin silymarin extract ;
 - d) evaporation of the solvent from the silymarin extract from step c);
 - e) removal of water from the evaporation residue from step d) to form a dried crystalline silymarin extract;
 - f) purification of ~~dry extract from the previous step from residual oil~~ the dried crystalline silymarin extract to remove residual oils by washing and drying of the dried crystalline silymarin extract.
 - g) ~~separation, washing and drying of the obtained crystals~~
2. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarin~~ silymarin from ~~Silybum marianum~~ according to the of claim 1, characterized by the fact that ~~the step of grinding is run~~ is done in a mill ~~with~~ comprising ~~rotating knives and screen of up to 40 mesh or less.~~
3. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarin~~ silymarin from ~~Silybum marianum~~ seeds according to the of claim 1, characterized by the fact that ~~grinded the ground seeds is removed~~ are transferred into a reactor with mechanical mixer whose form is following geometry of the reactor's ~~plate~~ vessel.

4. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~of according to the~~ claim 3, characterized by the fact that the step of defatting is done in an extractor at the temperature at which the hydrocarbon solvent returns boils.

5. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~according to the~~ of claim 1, characterized by the fact that in step b) defatting is done in percolator at the room temperature.

6. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~according to the~~ of claim 1, characterized by the fact that hexane ~~and/or~~ petroleum ether are used as solvents for defatting.

7. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~according to~~ of claim 6, characterized by the fact that n-hexane is used as the solvent for defatting.

8. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~according to the~~ of claim 7, characterized by the fact that the ratio between the seeds and n-hexane is from 1:2 to 1:5 m/V.

9. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~according to the~~ of claim-8 7, characterized by the fact that the ratio between the seeds and n-hexane is 1:3 m/V.

10. (Currently amended) ~~The method~~ Method for isolation of ~~sylimarins~~silymarin from Silybum marianum seeds ~~according to the~~ of claim 1, characterized by the fact that acetone is used as the medium polarity solvent for the extraction of defatted seeds.

11. (Currently amended) ~~The method~~ Method for isolation of ~~syllimarin~~silymarin from Silybum marianum seeds ~~according to the~~of claim 1, characterized by the fact that the extraction of defatted seeds is done in an extractor during 24 hours, at the approx. temperature at which acetone ~~returns~~boils.

12. (Currently amended) ~~The method~~ Method for isolation of ~~syllimarin~~silymarin from Silybum marianum seeds ~~according to the~~of claim 1, characterized by the fact that the extraction of defatted seeds is done in percolator during 72 hours, at ~~the~~ room temperature.

13. (Currently amended) ~~The method~~ Method for isolation of ~~syllimarin~~silymarin from Silybum marianum seeds ~~according to the~~of claim 10, characterized by the fact that the ratio between the seeds and acetone is from 1:2 to 1:5 m/V.

14. (Currently amended) ~~The method~~ Method for isolation of ~~syllimarin~~silymarin from Silybum marianum seeds ~~according to the~~of claim ~~13~~ 10, characterized by the fact that the ratio between the seeds and acetone is 1:3 m/V.

15. (Currently amended) ~~The method~~ Method for isolation of ~~syllimarin~~silymarin from Silybum marianum seeds ~~according to the~~of claim 1, characterized by the fact that the medium polarity solvent is acetone and the evaporated acetone residue is dried by azeotropic distillation with toluene.

16. (Currently amended) ~~The method~~ Method for isolation of ~~syllimarin~~silymarin from Silybum marianum seeds ~~according to the~~of claim 1, characterized by the fact that purification of dry extract from claim the 15 is done by ethers the separation of the residual oil from the dried extract be done using ethers of with between 4 and to 8 carbon C atoms.

17. (Currently amended) The method ~~Method~~ for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds according to the of claim 16, characterized by the fact that purification of ~~sylinarin~~silymarin is done approx. at the melting ~~boiling~~ temperature of ~~the ether used~~used ether.

18. (Currently amended) The method ~~Method~~ for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds according to the of claim 16, characterized by the fact that purification of ~~dry extract~~ the separation of the dried extract is done with tetrahydrofuran, diisopropyl ether or diethyl ether.

19. (Currently amended) The method ~~Method~~ for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds according to the of claim 18, characterized by the fact that purification of ~~dry extract~~ the separation of the dried extract is done with diisopropyl ether at the temperature of approx. 67 to 69 °C, during 25 to about 30 minutes.

20. (Currently amended) The method ~~Method~~ for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds according to the of claim 1, characterized by the fact that suspension is cooled to the room temperature, during 1 hour.

21. (Currently amended) The method ~~Method~~ for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds according to the of claim 1, characterized by the fact that crystales of purified ~~sylinarin~~silymarin are filtered and ~~several times washed~~ several times with diisopropyl ether.

22. (Currently amended) The method ~~Method~~ for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds according to the of claim 1, characterized by the fact that product is dried in drying section.

23. (Currently amended) ~~The method~~Method for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds ~~according to the of~~ claim-22_1, characterized by the fact that product is dried ~~in drying section~~ at increased temperature and decreased pressure.

24. (Currently amended) ~~The method~~Method for isolation of ~~sylinarin~~silymarin from Silybum marianum seeds ~~according to the of~~ claim-17_23, characterized by the fact that product is dried ~~in drying section~~ at 40.degree. C. and ~~the a~~ pressure of 8 to about 10 mbar.